

REMARKS

Applicant thanks the Examiner for the remarks and analysis contained within the Non-Final Office Action dated August 19, 2008. Applicant respectfully requests reconsideration of this application.

Claims 1, 2, 7-10, 12-16, 21-23, 25, 27 and 29 stand rejected under 35 U.S.C. §102(e) as being anticipated by or, in the alternative, as obvious over *Arts, et al.* (U.S. Publication No. 2004/0146437). Independent claims 1 and 14 each claim a "monolith." The Examiner contends that *Arts, et al.* discloses a filter 12 that is the equivalent of Applicant's claimed monolith. Applicant respectfully disagrees. A filter, such as that taught by *Arts, et al.*, is not a monolith as described and claimed by the Applicant. Figure 2 of Applicant's disclosure discloses the features of both a filter 28 and monolith 30. The filter 28 of Applicant's disclosure is the equivalent of the filter 12 described by *Arts, et al.* Applicant points out that a monolith, and not a filter, is claimed in claims 1-29.

Moreover, both independent claim 1 and independent claim 14 require "a photocatalytic coating" on the monolith. *Arts, et al.* is silent as to providing a photocatalytic coating on the monolith. The Examiner refers to paragraph [0053] of *Arts, et al.* as disclosing photocatalytic coatings applied to the monolith. However, paragraph 53 is silent as to any photocatalytic coating. In fact, paragraph [0007] of *Arts, et al.* teaches against providing any photocatalytic coating on the filter 12. Specifically, *Arts, et al.* details several disadvantages associated with utilizing a filter coated with metal oxide catalysts including increased expense and decreased quality control. The Examiner's interpretation of *Arts, et al.* is inconsistent with the entire disclosure of *Arts, et al.* Accordingly, claims 1-29 are neither anticipated nor made obvious.

Claims 4 and 5 stand rejected as being obvious over *Arts, et al.* in view of *Ichikawa* (U.S. Patent No. 6,421,915). Even if *Arts, et al.* taught each feature of Applicant's independent claims, claims 4-5 are not obvious. The Examiner acknowledges that *Arts, et al.* does not disclose a monolith comprising a honeycomb shape with a plurality of hexagonal passages. However, the Examiner contends it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the filter 12 of *Arts, et al.* to include a honeycomb shape with a plurality of hexagonal passages in order to provide effective purifiability of air quality while decreasing the amount of pressure loss within the system as exemplified by *Ichikawa*. Applicant respectfully disagrees.

First, there is no teaching, suggestion or motivation within the prior art that the device of *Arts, et al.* suffers from ineffective purifiability of air quality and/or system pressure loss. Therefore, the proposed modification of *Arts, et al.* appears unnecessary, and therefore would not be performed by a person of ordinary skill in the art.

Moreover, *Arts, et al.* teaches against the suggested modification. *Arts, et al.* teaches a V-bank filter 12 having a plurality of transverse intersecting walls 12c. The configuration of the transverse intersecting walls 12c defines upstream facing, open faced chambers 12d, and downstream facing, open faced chambers 12e. The filter configuration 12 of *Arts, et al.* slows the movement of contaminants and provides more time for biological agents to be killed by the UV radiation. See paragraphs [0053]-[0054]. Replacing the V-bank filter 12 of *Arts, et al.* with a monolith having a honeycomb shape that includes hexagonal passages would render *Arts, et al.* unsatisfactory for its intended purpose of slowing the movement of contaminants. See MPEP 2143.01(V). That is, the honeycomb shape of the proposed monolith would undesirably allow contaminants to move more freely in and through the hexagonal passages of the filter. Therefore, *Arts, et al.* teaches against the proposed modification.

Finally, the proposed modification would change the principle of operation of *Arts, et al.* and is therefore improper. The suggested modification of *Arts, et al.* in view of *Ichikawa* would require a substantial reconstruction and redesign of the filter 12, and would change the basic principle of operation of *Arts, et al.* from a V-bank type filter to a monolith having a honeycomb shape. This is improper under MPEP 2143.01(VI).

Claims 6, 24, 26 and 28 are also rejected as obvious over *Arts et al.* in view of *Engel et al.* and *Bigelow*. For all the reasons stated above, *Arts et al.* fails to teach several features of Applicant's claims. Therefore, these rejections are moot.

The Examiner provisionally rejects claims 1-5 and 10 on the grounds of non-statutory obviousness-type double patenting as being unpatentable over claims 1-3 and 8-12 of co-pending application numbers 10/789,962 and 10/788,845 in view of *Arts, et al.* As argued above, *Arts, et al.* fails to disclose a monolith, and fails to disclose a photocatalytic coating on the monolith. The claims are therefore not obvious. Applicant respectfully requests withdrawal of the double patenting rejection.

Applicant respectfully submits that all claims are in condition for allowance.

Applicant believes that additional fees in the amount of \$1,110.00 are required for a three month extension of time. The Commissioner is authorized to charge Deposit Account No. 03-0835 in the name of Carrier Corporation in the amount of \$1,110.00, as well as for any additional fees or credit the account for any overpayment.

Respectfully submitted,

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